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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,697	12/27/2001	Henry J. Pepin	1001.1460101	1495

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MINNEAPOLIS, MN 55403-2420

EXAMINER

THOMPSON, KATHRYN L

ART UNIT PAPER NUMBER

3763

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/034,697

Applicant(s)

PEPIN, HENRY J.

Examiner

Kathryn L Thompson

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/27/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evard et al (US 4,981,478) in view of Carson, Jr. et al (US 5,116,317). Evard et al discloses a support member used to form at least a portion of a catheter shaft, comprising an inner member defining an outer surface thereon and a first layer disposed over at least a portion of the outer surface of the inner member, the first layer including a selectively curable material, the first layer comprising ultraviolet-curable epoxy, a second layer disposed over at least a portion of the first layer, wherein the second layer includes a first wire ribbon wound in a helical pattern in a first direction, a third layer comprised of an ultraviolet-curable epoxy disposed over at least a portion of the second layer, a fourth layer disposed over at least a portion of the third layer, wherein the fourth layer comprises a second wire ribbon wound in a helical pattern in a second direction opposite the first direction, and a fifth layer disposed over at least a portion of the fourth layer, wherein the fifth layer comprises a polymer (Figure 2; Column 4, Lines 50-60). Evard et al does not disclose that the selectively curable material (epoxy) is at least partially cured at desired portions thereof.

Carson, Jr. et al does disclose at least partially cured epoxy (Column 3, Lines 32-35). Carson, Jr. et al teaches that ultraviolet-cured epoxy provides structural strength. It would have been obvious to one with ordinary skill in the art to use the teachings of Carson, Jr. et al to modify the invention of Evard et al and cure the epoxy of Evard et al so as to produce a support member with more structural strength.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evard et al (US 4,981,478) in view of Lefebvre (US 5,810,874). Evard et al discloses a support member used to form at least a portion of a catheter shaft, comprising an inner member defining an outer surface thereon and a first layer disposed over at least a portion of the outer surface of the inner member, the first layer including a selectively curable material, the first layer comprising ultraviolet-curable epoxy, a second layer disposed over at least a portion of the first layer, wherein the second layer includes a first wire ribbon wound in a helical pattern in a first direction, a third layer comprised of an ultraviolet-curable epoxy disposed over at least a portion of the second layer, a fourth layer disposed over at least a portion of the third layer, wherein the fourth layer comprises a second wire ribbon wound in a helical pattern in a second direction opposite the first direction, and a fifth layer disposed over at least a portion of the fourth layer, wherein the fifth layer comprises a polymer (Figure 2; Column 4, Lines 50-60). Evard et al does not disclose that the selectively curable material (epoxy) is at least partially cured at desired portions thereof.

Lefebvre does disclose cured epoxy. Lefebvre teaches using cured epoxy to fix a sleeve to a catheter. It would have been obvious to one with ordinary skill in the art to

Art Unit: 3763

use the teachings of Lefebvre to modify the epoxy of Evard et al and cure it, in order to provide an adhesive means and make certain that the different layers of Evard et al's support member are securely fixed to one another.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn L Thompson whose telephone number is 703-305-3286. The examiner can normally be reached on 8:30 AM - 6:00 PM: 1st Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 703-308-3552. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.



KLT  
February 22, 2003



**MICHAEL J. HAYES  
PRIMARY EXAMINER**